# Case 3717 – XYLOPHAGIDAE Purchon, 1941 (Mollusca: Bivalvia): proposed emendation of the spelling to XYLOPHAGAIDAE to remove homonymy with XYLOPHAGIDAE Fallén, 1810 (Insecta: Diptera)

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Abstract. The purpose of this application, under Articles 29 and 55.3 of the Code, is to remove the homonymy between the family-group names XYLOPHAGIDAE Purchon, 1941 (Mollusca: Bivalvia) and XYLOPHAGIDAE Fallén, 1810 (Insecta: Diptera), which are homonyms due to the similarity of the names of their respective type genera *Xylophaga* Turton, 1822 and *Xylophagus* Meigen, 1803. It is proposed that the stem of the generic name *Xylophaga* be emended to *Xylophaga*- to give XYLOPHAGAIDAE, while leaving the fly family name unaltered.

**Keywords.** Nomenclature; taxonomy; Insecta; Mollusca; Bivalvia; Diptera; xylophagi-DAE; XYLOPHAGAIDAE; *Xylophaga*; *Xylophagus*; *Nemotelus cinctus*; *Teredo dorsalis*; fly; wood-boring.

- 1. Meigen (1803, p. 266) proposed *Xylophagus* in the Diptera (Insecta) including only the single species *Nemotelus cinctus* De Geer, 1776 (p. 183), which is the type species by monotypy. Fallén (1810, p. 5) proposed a family-group name (as "XYLOPHAGEI") based on the genus *Xylophagus* Meigen, 1803 and included two genera: *Sicus* Fabricius, 1798 (p. 547) [non Scopoli, 1763], and *Xylophagus* Meigen, 1803. This family-group name (correctly spelled as XYLOPHAGIDAE in Stephens, 1829, p. 57) is in current use within the Diptera for a group of flies found worldwide comprising 134 species in nine genera (Woodley, 2011).
- 2. Turton (1822, p. 253) proposed the genus-group name *Xylophaga*, for a group of deep-water wood-boring bivalves, of which the type species is *Teredo dorsalis* Turton, 1819 (p. 185), by monotypy. Purchon (1941) recognized the uniqueness of this genus and proposed a family-group name [as "xylophaga" (Purchon, 1941, p. 32)] based on the genus *Xylophaga* Turton, 1822. Whereas some authors (Taki & Habe, 1950) maintained

Purchon's original spelling for the bivalve family, Turner's (1955, p. 145) monograph on the PHOLADIDAE treated the group as a subfamily and used the spelling XYLOPHAGINAE. In her treatment of the family in the Treatise on Invertebrate Zoology, Turner (1969, p. N721) became aware of the family name homonym with the Diptera and changed ["nom. correct."] the name of the bivalve subfamily to XYLOPHAGAIDAE. Three years later, Hoagland & Turner (1971, p. 115) maintained the latter spelling but noted that a petition would be needed to formalize the change. Bernard (1983, p. 61) independently changed the name to XYLOPHAGAIDAE, stating "nom. correct., herein pro XYLOPHAGIIDAE", but he did not provide a reason and misspelled Purchon's original orthography. Since 1983, most authors have used the emended spelling, XYLOPHAGAIDAE, and it is in current use (Harvey, 1996; Turner, 2002; Bieler & Mikkelsen, 2006, p. 235; Mikkelsen & Bieler, 2007, p. 389; Haga & Kase, 2008; Voight, 2008, 2009, 2015), although Coan & Valentich-Scott (2012, p. 905) used XYLOPHAGINAE, but noted the alternative often being used and the still remaining need for a petition. Most authors now rank this group as a separate family with the superfamily PHOLADOIDEA. Purchon's (1941) original spelling is thus not in current use.

- 3. The International Commission on Zoological Nomenclature is accordingly asked:
- (1) to use its plenary power to rule for the purposes of Article 29 of the Code, that the stem of *Xylophaga* Turton, 1822 is *Xylophaga*-;
- (2) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Xylophaga* Turton, 1822 (gender: feminine), type species by monotypy *Teredo dorsalis* Turton, 1819;
  - (b) *Xylophagus* Meigen, 1803 (gender: masculine), type species by monotypy *Nemotelus cinctus* De Geer, 1776;
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) dorsalis Turton, 1819, as published in the binomen Teredo dorsalis;
  - (b) cinctus De Geer, 1776, as published in the binomen Nemotelus cinctus;
- (4) to place on the Official List of Family-Group Names in Zoology the following names:
  - (a) XYLOPHAGAIDAE Purchon, 1941, type genus *Xylophagus* Turton, 1822 (Mollusca: Bivalvia);
  - (b) XYLOPHAGIDAE Fallén, 1810, type genus Xylophagus Meigen, 1803 (Insecta: Diptera);
- (5) to place on the Official Index of Rejected or Invalid Family-Group Names in Zoology the name XYLOPHAGINIDAE Purchon, 1941, spelling emended to XYLOPHAGAIDAE, as ruled in (4)(a) above.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Secretariat, ICZN, Lee Kong Chian Natural History Museum, 2 Conservatory Drive, Singapore 117377, Republic of Singapore (e-mail: iczn@nus.edu.sg).